

ABSTRACT OF THE DISCLOSURE

In a detecting apparatus, a resolver generates signals whose magnitudes vary periodically in accordance with a positional change of a fixed element side rotating shaft, which is a base for rotation of a rotator and whose position is offset when force of a component parallel to a rotation plane is applied thereto, and in accordance with a rotational state of the tire. An R/D converter generates pulses whose periods correspond to a rotational angle of the rotator and to positional offset of the rotating shaft. From the pulses, a computer detects a characteristic amount which varies in accordance with the positional offset of the shaft. On the basis of the detected amount and a relationship which is determined in advance on the basis of stiffness of the shaft and the amount, the computer detects a moment applied to the shaft, and computes a force generated at the tire.